

Claims

1. A two-component polyurethane adhesive for wooden materials comprising components A and B wherein
5 A) is:
a polyol mixture, containing at least
a) 10 to 98 wt.% of at least one oleochemical polyol,
b) 1 to 7.5 wt.% of at least one diol having a
10 hydroxyl value of 400 to 2000 and
c) 1 to 7.5 wt.% of at least one tri-, tetra- or pentafunctional polyol having a hydroxyl value of 200 to 2000, the wt.% of each of a), b) and c) based on the whole of the polyol
15 mixture, and
B) is:
at least one polyisocyanate, wherein the NCO/OH ratio of components A) and B) is within the range of 1.5 to 0.9, and
20 further comprising from 0 to 85 wt.%, based on the total weight of the adhesive, of at least one auxiliary substance;
25 wherein the polyol mixture contains up to 60 wt.%, based on the total weight of the polyol mixture, of a resin homogeneously dissolved therein.
2. The adhesive of claim 1 wherein the resin is a natural
30 resin.
3. The adhesive of claim 2 wherein the natural resin is a gum colophony or shellac resin, or derivatives thereof.
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4. The adhesive of claim 1 wherein the resin is a synthetic resin.

5. The adhesive of claim 4 wherein the synthetic resin is a hydrocarbon, terpene, alkyd, furan, coumarone-indene, aldehyde or ketone resin, or a glycerol resin ester.
- 5 6. The adhesive of claim 1 wherein the oleochemical polyol comprises at least one polyol selected from the group consisting of castor oil, dimeric diols and polyols prepared by ring opening of epoxidised triglycerides of an olefinically unsaturated mixture of fats using
10 alcohols.
7. The adhesive of claim 6 wherein the at least one polyol is castor oil.
- 15 8. The adhesive of claim 1 wherein the diol is at least one diol selected from among the alkanediols having 2 to 6 C atoms.
9. The adhesive of claim 8 wherein the alkanediols having
20 2 to 6 C atoms are selected from the group consisting of 1,4-butanediol, dipropylene glycol and diglycol.
10. The adhesive of claim 1 wherein the tri-, tetra- or
25 pentafunctional polyol comprises at least one polyol selected from the group consisting of glycerol, pentaerythritol, propoxylated, ethoxylated ethylenediamine, and a tetraol.
11. The adhesive of claim 1 wherein the polyisocyanate is
30 an aliphatic, cycloaliphatic or aromatic isocyanate having a functionality of 2 to 4.
12. The adhesive of claim 1 wherein the auxiliary substance
35 is selected from the group consisting of fillers, catalysts, flow-control agents, and deaerating agents.
13. A method of bonding wooden materials comprising applying to the wooden materials to be bound the adhesive of claim 1.

14. The method of claim 13 wherein the wooden materials are loadbearing wooden structural members.
- 5 15. The method of claim 13 wherein the water content of the wooden material during bonding is from 2 to 20 wt.%.